## Results

The series of improvements made in the innovate scenario had substantial impacts on the operation of the regional transportation system. These results are described below.

Vehicle miles traveled and vehicle hours traveled (total and in congestion)

When compared to the reference scenario, the elements of the innovate scenario led to minimal change in total vehicle miles traveled (VMT) and vehicle hours traveled (VHT). However, VMT and VHT in congestion were reduced with substantial reductions to congested VMT in particular.

These improvements were overwhelmed by the overall increase in tripmaking that is expected to occur by 2040 due to forecast population and employment growth. Although VMT in congestion and VHT in congestion showed improvements from the reference scenario, they still increased by 25% and 37%, respectively, over current conditions. This indicates that other means are needed beyond the technology and pricing elements in this scenario to address our region's congestion.

To provide more detail on the effect of transportation system performance on freight movements, truck traffic is reported separately. The strategies in the innovate scenario are somewhat more effective at improving travel conditions for trucks than they are for passenger vehicles. Congestion VMT and VHT for trucks both declined substantially from the reference, but still exceeded current figures.

Vehicle miles traveled (VMT) and vehicle hours traveled (VHT)

Measure	Current	2040 reference	2040 innovate	Difference, innovate minus reference	Difference, innovate minus current
Total VMT	173,543,681	199,842,335	201,377,660	1,535,325 1%	27,833,979 16%
VMT in congestion	31,894,121	47,760,613	39,998,787	-7,761,826 -16%	8,104,666 25%
Total VHT	7,211,823	8,758,414	8,651,780	-106,634 -1%	1,439,957 20%
VHT in congestion	2,583,120	3,710,978	3,547,427	-163,551 -4%	964,307 37%
Truck VMT	31,689,032	39,605,484	39,632,354	26,870 0%	7,943,322 25%
Truck VMT in congestion	5,575,160	9,670,255	6,926,617	-2,743,638 -28%	1,351,457 24%
Truck VHT	1,168,719	1,573,918	1,526,479	-47,439 -3%	357,760 31%
Truck VHT in congestion	384,333	645,544	567,149	-78,395 -12%	182,816 48%

## Mode share

The innovate scenario resulted in considerable increases in transit ridership, a small increase in non-motorized trips, and a small decrease in auto trips. When compared to current tripmaking, all modes increased; transit trips increased by the highest amount, 60%. Transit mode share increased from 10% in the reference scenario (as well as currently) to over 12% in the innovate scenario. Please note that these figures include all trips, not just work trips, and the total amount of trips made between the innovate and reference scenarios are approximately equal.

Trips by mode

Measure	Current	2040	2040	Difference,	Difference,
		reference	innovate	innovate minus	innovate minus
				reference	current
Auto trips	23,519,460	28,377,431	27,584,846	-792,585	4,065,386
				-3%	17%
Transit trips	2,400,810	3,069,106	3,852,994	783,888	1,452,184
				26%	60%
Non-motorized trips	355,706	492,444	507,266	14,822	151,560
				3%	43%

## Trip duration

The duration of trips fell between the reference and the innovate scenarios for transit trips, but increased for auto trips. This was caused primarily by the more dispersed land use pattern in the innovate scenario compared to the others, as well as increases in highway efficiency; this generally led to trips of greater distances. Please note that this figure includes all trips; work trips are generally longer in duration than others.

Trip duration (average minutes of travel)

Measure	Current	2040 reference	2040 innovate	Difference, innovate minus reference	Difference, innovate minus current
Auto trips	21.7	22.1	24.3	+2.2 +10%	+2.6 +12%
Transit trips	35.2	37.5	34.1	-3.5 -9%	-1.1 -3%